NEW AUSTRALIAN FISHES. PART 21. A NEW SPECIES OF *CENTROBERYX* (BERYCIDAE)

By T.Shimizu¹ and J. B. Hutchins²

¹14-12, Komone 4-chome, Itabashi-ku, Tokyo 173, Japan ²Department of Ichthyology, Western Australian Museum, Francis St, Perth, Western Australia 6000

Abstract

Shimizu, T. and Hutchins, J. B., 1987. New Australian fishes. Part 21. A new species of *Centroberyx* (Berycidae). *Mem. Mus. Vict.* 48: 89-90.

Centroberyx australis is described as new from south-western Australian seas. It is distinguished from the closely related *C. gerrardi* (Günther) by a higher lateral line count (39-41 vs 36-38), coarser body scales, different nostril configuration, and eye coloration (yellow vs red).

Introduction

Hutchins and Thompson (1983) illustrated a species of *Centroberyx* from south-western Australia similar in general appearance to *C. gerrardi* (Günther), but differing in having a yellow rather than a red eye. This paper describes the species as new.

The methods are those used by Hubbs and Lagler (1947). Material is lodged in the Western Australian Museum, Perth (WAM), Hokkaido University, Laboratory of Marine Zoology, Hokodate (HUMZ), and the National Science Museum, Tokyo (NSMT).

Centroberyx australis sp. nov.

Figure 1

Centroberyx species Hutchins & Thompson, 1983: 24, 77, fig. 83.

Material examined. Holotype: Western Australia, off Ocean Reef (31°47'S, 115°20'E), K. Bentley, handline, 18 Sep 1982, WAM P.27720-001 (202 mm SL).

Paratypes: Western Australia. 30-50 km off Ocean Reef, J.B. Hutchins, handline at 60-120 m, 30 Sep 1982, WAM P.27732-002 (3 specimens, 175-191 mm SL), NSMT-P 44392 (208 mm SL); off Ocean Reef, K. Bentley, handline at 90-100 m, 16 May 1982, WAM P.27607-002 (2 specimens, 185-209 mm SL); off Marmion (31°50'S, 15°20'E), K. Bentley, handline at 86 m, 18 Sep 1982, WAM P.28238-001 (201 mm SL); Great Australian Bight (33°16'S, 128°02'E), bottom trawl, 115 m, 24 Dec 1965, HUMZ 21044 (275 mm SL).

Description. Dorsal fin rays VI, 13-14; anal fin rays 1V, 12-13; pectoral fin rays 13-15; pelvic fin rays I, 7; caudal fin rays iv, 1, 10, 9, 1, iv; branchiostegal rays 8; gill rakers 6-7/16-18; scale rows around caudal peduncle 18-19; lateral line scales 39-41; scales above lateral line 8-9; scales below lateral line 13-14; scales from pclvic base to anus 7-9; vertebrae 10/14. Body ovate, depth 46.0-49.7% SL; head large, length 38.8-41.3% SL; body compressed, width 45.6-49.3% SL. Snout length 23.4-26.6% of head length, 60.8-72.6% of eye diameter. Upper jaw long, posterior end almost reaching postorbital margin, length 55.4-61.5% head length. Eye large, diameter 33.0-39.8% head length. Interorbital convex, width 19.5-26.9% head length. Caudal peduncle rather long, depth 33.4-35.3% head length. Pectoral fin long and triangular, length 73.9-77.2, and pelvic fin length 55.4-65.1, both % head length. Nostrils large and close together, distance separating them subequal to diameter of rim of anterior one posterior nostril without rim; small bony knob on rear margin of anterior nostril. Body scales with long spinules on posterior margin, spinules on central portion more slender; scales across breast with short spinules; scales on dorsal and anal fin bases enlarged, forming a shallow scaly sheath; small scales extend on to caudal fin; axil of pectoral fin scaleless; pelvic fin with long axillary scale. V-shaped scales along pelvic fin base to anus,

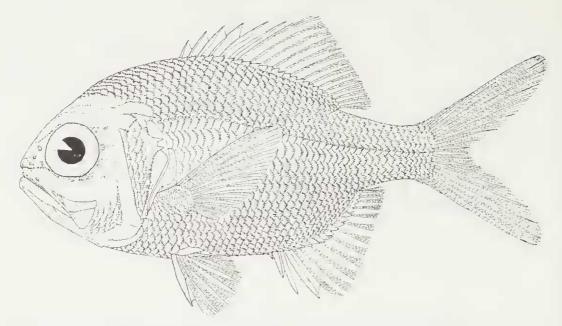


Figure 1. Centroberyx australis, holotype, WAM P.27720-001, 202 mm SL.

forming a sharp ventral ridge (each scale has a large central spinule on posterior margin). Scale pad present in two rows along dorsal midline, being more distinct anteriorly.

Colour in life: Head and body reddish orange, more silvery ventrally; each scale row appearing as a whitish longitudinal line; spines and rays of all fins pale reddish orange (noticeably darker in caudal), spine tips white, fin membranes transparent; posterior margin of caudal fin transparent; eye golden yellow, pupil black. Colour in ethanol: pale yellowish brown, more silvery on ventral half; eye yellowish to dusky.

Distribution. Great Australian Bight to the Muiron Islands, off North West Cape, Western Australia.

Etymology. From the Latin *australis* (southern) with reference to its distribution in southern Australian waters.

Remarks. Centroberyx australis is closely related to C. gerrardi, with which it occurs sympatrically,

differing in the higher lateral line count (39-41 vs 36-38), in the nostril configuration (in *C. gerrardi* the nostrils are separated by a distance far greater than the diameter of the anterior nostril), in coloration (lacks the latter's prominent white stripe along the lateral line, and has a yellow eye vs a red one), in maximum size (32 cm vs 66 cm) and has coarser body scales. *C. affinis* (Günther) has a higher dorsal spine count (7 vs 6) and a red eye. In addition, the nostrils of *C. affinis* are considerably larger in size and almost touching one another.

C. australis has never been collected at depths shallower than 50 m. It apparently occurs in schools off the bottom.

References

Hubbs, C.L. and Lagler, K.F., 1947. Fishes of the Great Lakes Region. Bull. Cranbrook Inst. Sci. 26: 1-186.

Hutchins, J.B. and Thompson, M. 1983. The Marine and Estuarine Fishes of South-western Australia. A Field Guide for Anglers and Divers. Western Australian Museum: Perth.